

DOCKET NO.: 288459US0X PCT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF:

GROUP: 1656

Fabrice AGOU, et al.

SERIAL NO: 10/573,161

EXAMINER: Monshipouri, Maryam

FILED: March 1, 2007

FOR: SELECTIVE INHIBITION OF NF-KAPPAB ACTIVATION BY PEPTIDES  
DESIGNED TO DISRUPT NEMO OLIGOMERIZATION

**ELECTION AND RESPONSE TO LACK OF UNITY REQUIREMENT**

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

Sir:

In response to the Supplemental Lack of Unity/Restriction Requirement dated June 23, 2009, the Applicants elect with traverse:

**Group I(b)**, Claims 9-14, 15 and 54-55, drawn to fusion polypeptides that inhibit NF $\kappa$ B pathway, and

**Species (e)** human NEMO NLM.

For the convenience of the Examiner the attached Appendix describes the SEQ ID NOS and sequences of NEMO derived peptides.

These requirements are traversed, since no undue burden would be imposed in the examination of the claims of Groups I-VII or Species (a)-(f) together. Unity must be assessed with respect to a group inventions sharing a common technical relationship. In the present case each designate group involves polypeptide inhibitors of NF $\kappa$ B, polynucleotides expressing such inhibitors, or methods of using or identifying such inhibitors.

Furthermore, Species (a)-(f) are well-defined sequences sharing significant structural identity irrespective of whether they are derived from a human or murine source. The attached BLAST alignment shows the high degrees of identify among these sequences. Thus, these

sequences are not unrelated in chemical structure and function and share significant structural elements related to their activities.

In the event that the Lack of Unity Requirement is maintained, the Applicants respectfully request that the claims of any nonelected group (or otherwise withdrawn claims) which depend from or otherwise include all the limitations of an allowed elected claim, be rejoined upon an indication of allowability for the elected claim, see MPEP 821.04. It is the Applicants understanding that additional species will be examined upon an indication of allowability for a generic claim reading on the elected species.

Accordingly, the Applicants respectfully request that the Restriction and Election of Species Requirements be withdrawn and all the claims examined together.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read "Thomas Cunningham", is written over a horizontal line.

Thomas M. Cunningham, Ph.D.  
Registration No. 45,394

Customer Number

**22850**

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 08/07)

### Sequence of NEMO derived peptides

Name	Sequence	Constructions with NEMO Human sequences
NLM-DR	LKAQADIIYKAR <u>F</u> QAERHA REK (SEQ ID NO: 30)	LKAQADIIYKAR <u>F</u> QAERQAREK (SEQ ID NO: 35)
BODIPY-Ant-NLM-DR	B-CRQIKIWFQNRMMKWK KLAQADIIYKAR <u>F</u> QAERHAREK (SEQ ID NO: 31)	B-CRQIKIWFQNRMMKWK KLKAQADIIYKAR <u>F</u> QAERQAREK (SEQ ID NO: 36)
BODIPY-TAT-NLM-DR	B-CYGRKKRRQRRR LKAQADIIYKAR <u>F</u> QAERHAREK (SEQ ID NO: 32)	B-CYGRKKRRQRRRLKAQADIIYKAR <u>F</u> QAERQAREK (SEQ ID NO: 37)
BODIPY-R7-NLM-DR	B-CRRRRRRR LKAQAKIYKAR <u>F</u> QAERHAREK (SEQ ID NO: 33)	B-CRRRRRRRLKAQADIIYKAR <u>F</u> QAERQAREK (SEQ ID NO: 38)
BODIPY-R9-NLM-DR	B-CRRRRRRR LKAQAKIYKAR <u>F</u> QAERHAREK (SEQ ID NO: 34)	B-CRRRRRRRLKAQADIIYKAR <u>F</u> QAERQAREK (SEQ ID NO: 39)